

of the Volga region. Suitable for trial in this country in the Dakotas and Minnesota particularly, but might also be transformed into a good winter wheat in districts farther south. Amount obtained, 6 bushels.

Reprinted from Inventory No. 4. See Carleton, Bull. 23, Div. Bot.: 16.

2956. TRITICUM VULGARE.

Wheat.

From Russia. Received March, 1899, through Mr. M. A. Carleton.

Banatka Winter wheat. From Kublich, in eastern Podolia, but introduced there originally from the Banat district in Hungary. Mean annual rainfall of the region, about 18 inches; for the growing season (May to September, inclusive), about 10 inches. Mean annual temperature, near 44.6°. The locality is near the edge of the "black earth" belt, and therefore partakes also somewhat of the nature of the soils of the "gray forest lands." The wheat is probably adapted to almost any medium soil of our prairie region, or even of New York. Should be sown early (September 10 to 15). Mean harvest time, July 27. An excellent semihard red wheat, of medium-sized grains. Very popular in Hungary, but made perhaps all the better by acclimation in Russia. Suitable for trial in Michigan, Ohio, New York, Indiana, Illinois, Kansas, and perhaps Nebraska and Iowa. Amount obtained, 9 bushels.

Reprinted from Inventory No. 4. See Carleton, Bull. 23, Div. Bot.: 17.

2957. TRITICUM POLONICUM.

Polish wheat.

From Russia. Received March, 1899, through Mr. M. A. Carleton.

Polish Spring wheat. From Glinyanaya, in northern part of Kherson government. Mean annual rainfall of the region, about 20 inches. Mean annual temperature, about 44.6°. Sown in this region about April 15, but the seed time varies exceedingly, depending on the condition of the weather. Period of growth about 115 days. Mean harvest time about August 1. This variety belongs to the species *Triticum polonicum*, and must not be confused with the sort that is most commonly called Polish wheat in Russia, which latter is a variety of *Triticum vulgare* and entirely different. It is the largest-grained wheat known, is extremely hard, and contains a very large per cent of gluten comparatively. It is especially valuable for macaroni production and for certain pastries. It is at first bearded, but loses its beards at harvest time. It seems adapted to a soil not too rich in humus, with considerable clay and some sand, and a rather warm, dry climate. Should be tried in this country in the western portions of Texas, Oklahoma, Kansas, and Nebraska, in eastern Colorado, Arizona, and California, and perhaps in some of the Southern States. It is considerably resistant to orange-leaf rust. Amount obtained, 6 bushels.

Reprinted from Inventory No. 4. See Carleton, Bull. 23, Div. Bot.: 18.

2958. TRITICUM VULGARE.

Wheat.

From Russia. Received March, 1899, through Mr. M. A. Carleton.

Sandomir Winter wheat. From the government of Radom, in Poland. Mean annual rainfall, 27 inches; for the growing season (May to September, inclusive), 15.5 inches. Mean annual temperature, about 44.6°. Mean harvest time, August 6. A rather soft, plump, white wheat, quite susceptible to changes of soil and climate. Best grades of the variety to be obtained only in Poland, near the town of Sandomir. Has already been tried in the United States with some success. Might be of especial value for cracker making and for certain breakfast foods. Should be tried on the Columbia plains, in northern California, and in New York. Amount obtained, 3 bushels.

Reprinted from Inventory No. 4. See Carleton, Bull. 23, Div. Bot.: 19.

2959. TRITICUM DICOCCUM.

Emmer.

From Russia. Received March, 1899, through Mr. M. A. Carleton.

Ufa Spring emmer. From the government of Ufa, about 8 miles from the city of the same name. Mean annual rainfall, 16.6 inches; for the growing season (May to September, inclusive), 10.9 inches. Mean annual temperature, 37.5°; for January, 9.5°; for July, 69.4°. Soil a very rich, deep, black loam, the famous "black earth" of Russia. Should be sown quite early in the spring, drilled in at the rate of 2 to 2½ bushels per acre. Period of growth about the same as for oats. This very hardy